



# Care and planting of forest trees



## Tree planting check list.

Plant coniferous trees in the early spring soon after the frost leaves the ground.

Plant trees the same day they arrive if possible.

Keep tree roots moist and covered at all times until planted.

Plant trees about 13 millimetres (one-half inch) deeper than the original depth at which they grew in the nursery. (Look for change in colour on the stem.)

Pack soil around tree roots with your heel.

Protect plantation from fire, grazing, rodents, insects and disease.

## IMPORTANT:

This brochure outlines the steps to follow to begin successfully a plantation of forest trees.

The Ministry of Natural Resources has collected seed, sown it and gone to great lengths to place in your hands good-quality trees in a healthy condition.

Whether these trees grow into a thriving plantation, increasing annually in value, depends mainly on you.

Extra care — to ensure that the tree roots do not dry out and are planted properly in the spring — will do much to lessen expensive re-planting.

On request, Ministry field staff may make inspections and advise you on plantation problems.

For this service, contact your local District Administrative Centre of the Ministry of Natural Resources.

# Steps to successful tree planting.

## Inspection.

Open package and check trees for quantity and condition. The needles should be green and moist but free from mould. If necessary, water the tree roots.



## Storage for 2 to 3 days.

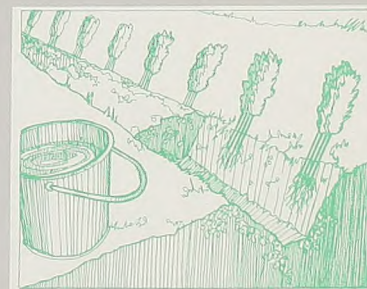
The moist package of trees may be stored for two or three days in a cool, shaded spot. Keep the tree roots moist and plant the trees as soon as possible.



## Storage for more than 3 days.

For longer storage, dig a V-shaped trench in a well drained, shaded spot. Spread bundles along one side of the trench. Cover the roots with soil and pack with your heel. Water the roots as needed.

For long periods, break the bundles and spread trees along one side of the trench. Proceed as above.



TREES ARE  
LIVING THINGS  
• BE CAREFUL  
WITH THEM

PREVENT FOREST FIRES

# Steps to successful tree planting.

## Transportation.

Carry trees to the planting area in a container such as a pail or tub, partly filled with water. During planting, carry trees in a pail containing two or three inches of water. Use damp moss or wet burlap for extra protection of trees in transit.



## Planting by machine.

The use of a machine should be considered where more than 2 hectares (5 acres) are to be planted at one time. (Slopes too steep or stony for safe tractor operation must be planted with hand tools.) For type, availability and cost of machines, contact the local office of the Ministry of Natural Resources.



## Planting by hand.

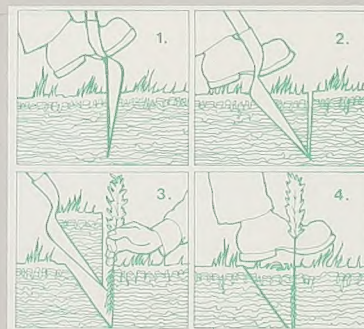
Vegetative competition is the most common reason for mortality of newly-planted tree seedlings. Prepare the planting area by ploughing furrows at the desired spacing or by removing a one-foot square of sod from each planting spot. Chemicals, such as herbicides, are very effective in vegetation control either before or after planting. Contact the local office of the Ministry of Natural Resources for detailed information.



## Hand planting method.

The wedge method of planting is best for most Ontario conditions.

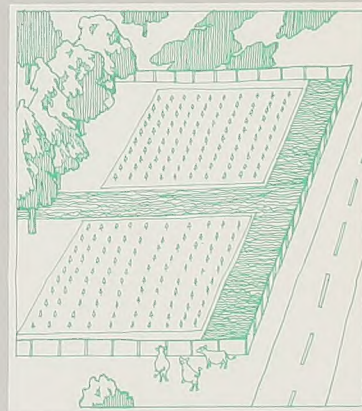
1. Tramp shovel straight down into soil with back of shovel away from you.
2. Make sloping cut with back of shovel towards you.
3. Remove wedge of soil. Place tree in hole with roots against vertical face.
4. Return wedge. Tramp soil around tree with your heel.



## Care after planting.

To guard against fire, leave 6 metres (20 feet) of space along the edge of plantations bordering travelled roads. This "fire guard" must be cultivated and kept free of vegetation. For every 4 hectares (ten acres) of trees, leave a 7 metre (23-foot) wide strip down the middle of the plantation and at right angles to the main road. This space provides a fire guard and access for future cutting.

Fence the plantation if grazing by livestock is a risk. Tree guards or chemical repellants may be used to discourage browsing by rodents. During spring and summer, inspect trees periodically for insect, disease and rodent damage. Apply to the local office of the Ministry of Natural Resources for detailed information on control measures.





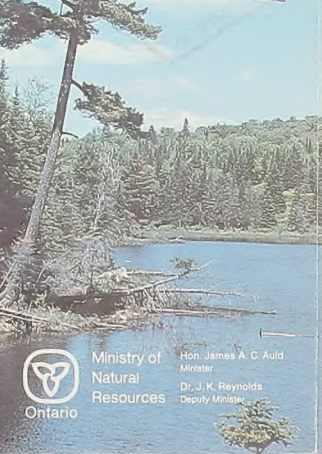
# Algonquin Provincial Park

Government Publications

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## Welcome

Welcome to the oldest provincial park in Ontario and one of the largest parks in Canada. Located on the southern edge of the Canadian Shield between Georgian Bay and the Ottawa River, the 7600 square km of Algonquin Provincial Park straddle the highlands which have become one of Ontario's favourite recreational areas. Here in this land of lakes, rivers, and forests, Algonquin provides unexcelled opportunities for outdoor recreation and education. Here, not far distant from the most populous centres of southern Ontario, is the call of a loon echoing from rocky lake shores, the sunset silhouetting a solitary pine, a moose submerged his massive head to feed on water lily roots, and a beaver forging a rippling wedge across a glassy pond. A fish splashes, a fox barks, and a broad-winged hawk calls as it sails over the forest. A chipmunk, tall erect, streaks across a clearing and plunges into the protection of the forest underground. Here and there in the forest, the shade is relieved by splashes of sunlight and carpets of bunchberry. A raven, croaking from a perch in a tall yellow birch, surveys the scene of thick maple foliage relieved occasionally by the green spruces of spruce and balsam. Two canoeists camp on a quiet lake pause from their evening coffee to drink in the wild music of waves wafting over the hills. This is Algonquin Provincial Park.

## History

The Algonquin landscape as we know it today is young. It was exposed just 11,000 years ago when the last of four stupendous glaciers slowly melted northwards. The glaciers had each scoured and bulldozed the land, crushing it under as much as three km of ice. When it finally departed, the ice revealed a barren landscape of rocky, rounded hills, huge deposits of sand and gravel, and thousands of lakes. Slowly the land was colonized, by arctic tundra plants at first, followed by spruce and pine and soon afterwards by the other tree species which make up the forests of Algonquin. In the western two-thirds of the Park, hardwood forests of sugar maple, beech, and yellow birch covered the hills, with groves of hemlock here and there, and scattered giant white pine towering up through the hardwoods. In the drier and sandier eastern part of Algonquin the forests were of white pine, red pine, and jack pine. Throughout the Park, black spruce bogs developed in low lying, poorly drained areas, lending a northern flavour to the Algonquin mood. Like all forests, those of Algonquin were disturbed from time to time by wind, insect outbreaks, and fire. Indeed these agents of change were normal and vital parts of the primitive environment. Since many kinds of trees depended on such disturbances for regeneration, the composition of the old forests would have

been quite different without them. Poor soils, harsh climate and the whims of fire and insects combined to create the shifting mosaic of deciduous and coniferous forests to typical of Algonquin.

For most of the history of this living, dying, and slowly but constantly changing wilderness, man was not a very important element. He was represented by scattered bands of Indians who came to fish, hunt, and pick berries, but his numbers were never large and he had little influence.

It was not until the mid-1800's that this began to change. Pioneer loggers pushing up from the Ottawa Valley reached Algonquin in search of the great white pine trees whose prime wood was increasingly in demand by an expanding British economy. With nothing but axes, and forced to live in remote, primitive camps, the men felled the giant pine, squared them, and when spring came drove the timber down to the Ottawa River and the outside world. At first it seemed the supply of big pine would last forever. But each year more and more men came to "hurl down the pine" and each year they pushed farther and farther into the wilderness.

By the time the Park was created in 1893, most of Algonquin's big pine had been cut and fires felled by pine slash had ravaged large areas. Algonquin was not established, therefore, to preserve part of the primitive environment, which had already been significantly altered, but rather to serve as a wildlife sanctuary and, by excluding agriculture, to protect the headwaters of the five major rivers which flow from the Park. It was not intended to stop logging for pine, which at that time was the only commercially valuable species. Soon afterwards, the government allowed the cutting of other tree species and ever since Algonquin has been providing a wide variety of forest products ranging from yellow birch veneer, to red pine poles, to pulpwood, and logs for lumber and furniture. The wealth generated from Algonquin forests is the mainstay of the Park region's economy.

## Management

For much of the logging history of Ontario and Algonquin Park little or no thought was given to the future of a forest once it had been logged. Now, all the accessible productive forest land in the province (including the Park) is under management and for this purpose is divided into forest management units, each under the jurisdiction of a professional Ministry forester.

The forester tries to achieve two things. First, he helps nature to grow the greatest and most valuable possible volume of wood as quickly as possible. Secondly, he sees that the amount which is cut is no greater than the amount grown in the same period. In



this way, much as a farmer does with his crops, the forester tries to see that the forest will continue to produce the same high volume of wood forever. At the same time, Algonquin is a Provincial Park, and as such, is dedicated to you, the people of Ontario and our visitors, for your healthful enjoyment and education. The Park accordingly has regulations designed to minimize conflict between roads and logging operations on the one hand, and recreational use on the other. Roads are restricted in width and kept away from shorelines and portages whenever possible. Logging is not permitted in the vicinity of major canoe routes in the summer months, and never in other areas containing features of exceptional scientific, historic, or educational value. Significant recreational demands on Algonquin Park are relatively new but they have been growing rapidly. Several years ago, what is now the Ministry of Natural Resources came to realize that a great deal of information and careful analysis were needed if all the demands placed on Algonquin Park were going to be met. The Ministry therefore conducted studies on a wide range of Park subjects — from the carrying capacity of canoe routes to the location of rare plants. It also sought, and accepted, most of the recommendations of an advisory committee set up to examine the issues and conflicts raised by the demands placed on the park. This information was used in determining the extent and primary objectives of the various Park Zones whose area and management policies are set forth in the Algonquin Park Master Plan, released in 1974. Logging is now restricted to 75% of the Park and is carried out by the Algonquin Forestry Authority, a Crown Corporation set up in 1975.

## Wildlife

Lying as it does in the transition zone between southern broadleaf forests and northern coniferous forests, Algonquin Park is the home of many birds and mammals typical of both major forest types. Among birds, this mingling of north and south is especially striking. Such northern birds as the raven, gray Jay, and spruce grouse are found along with such southern species as the rose-breasted grosbeak, brown thrasher, and the scarlet tanager.

Among mammals, more northern animals such as the wolf, the moose, and the fisher occur along with southern species such as the raccoon and the white-tailed deer.

The latter animal, incidentally, was very rare or even altogether absent in Algonquin Park before the coming of the pioneer loggers. Deer feed on the low growth of young trees and in the primitive Algonquin environment, disturbances such as fire did not occur frequently enough to keep a high enough percentage of Algonquin in young forest. This and the deep snows of Algonquin winters combined to make life very difficult for deer, so in those days moose, and possibly caribou, were more typical of Algonquin. The destruction of many parts of the original forests by loggers and the fires they started brought about a distinct improvement in conditions for deer which then multiplied spectacularly. More than a generation of Ontario residents came to associate Algonquin Park with the sight of deer coming to the roadside to accept handouts.

Today, with almost total fire suppression and modern forest management, far less deer food is being created and the deer population has declined drastically — here and everywhere else in the northern part of the deer's range. In other words we are seeing a return to the original conditions where deer were very rare and it is highly unlikely that Algonquin will ever again have the tremendous numbers of deer it had in the 1940's and 1950's.

## Fishing

Algonquin lakes are cold and deep, rich in oxygen, but poor nutrients since they lie on the hard, ancient, Precambrian rocks of the Canadian shield. Such waters do not lend themselves to rapid growth of most fish, but they are ideal for trout. Lake trout are found in most of the larger lakes and speckled trout occur in these and many of the smaller lakes as well. Small-mouthed bass are not native, but have been established in many of the lakes along Highway 60. Pike, muskellunge, and walleye are found only in the extreme northeastern part of the Park. More complete information on fishing in Algonquin (including lake and fish listings) can be obtained in the booklet listed below.

## TWO ALGONQUINS TO CHOOSE FROM

### 1 THE PARK INTERIOR

The essence of Algonquin is its vast interior of maple hills, rocky ridges, spruce bogs, and thousands of lakes, ponds, and streams. The only way to explore this rugged beauty is by canoe or on foot.

**Canoe Routes** There are over 1500 km of canoe routes in the Park interior. Descriptions of these routes, and other information needed by the Algonquin canoeist are provided in the map-brochure described overleaf. The map-brochure is available for \$1.00 at the gates or the Canoe Centres, located at Canoe Lake and Opeongo Lake. The Canoe Centre staffs will be glad to provide you with advice and instruction on the arts of canoeing and camping in the interior.

**Hiking Trails** The Highland Hiking Trail (with 19 and 35 km loops) and the Western Uplands Hiking Trail (with 32, 55, and 71 km loops) both start from Highway 60. Both are shown in the same map-brochure, (see order form) costing 50¢.

**Interior Camping Permits** Anyone camping overnight in the Park Interior must possess an Interior Camping Permit costing \$3.00 per night per canoe, or in the case of backpackers, \$3.00 per night per tent. An Interior Camping Permit authorizes camping at definite campsites, designated by posters, and generally located at least three km beyond any access point. No more than nine individuals are permitted to camp at one interior campsite. Larger parties may travel together but they must break up to camp.

## TWO ALGONQUINS TO CHOOSE FROM

### 2 THE HIGHWAY 60 CORRIDOR

For those who desire a less strenuous holiday, camping, picnicking, and other activities are available along Highway 60 which travels 56 km through the southern section of the Park.

**Park Season** Most Park facilities operate from late April or early May to mid-October. Highway 60 is nevertheless open all year round and the Park may be used in the off season although most services are not available at that time.

**Permits** Anyone entering Algonquin Park and using Park facilities along Highway 60 requires a vehicle permit (either daily for \$2.00 or annual for \$20.00) or a campsite and vehicle permit. The latter permit also allows you to camp in an organized campground and costs \$5.50 per night at Tea Lake, Rock, Coon, and Opeongo, and \$6.00 at all other car campgrounds along Highway 60.

With the exception of vehicles driving straight through the Park (no permit required), only persons possessing a valid camping permit or residing in Algonquin may remain in the Park after 11:00 o'clock at night.

**Picnicking and Swimming** Picnic grounds are located at various places along the highway. Swimmers will find good sand beaches and change houses at the picnic grounds (east and west) at Lake of Two Rivers. Parents are reminded that they are responsible for their children's safety on the beach. No pets are permitted on the beach or in the water.

**Lodges** Three lodges operate in the Highway 60 corridor, providing meals and overnight accommodation. The locations of Arrowhead Pines, Bartlett Lodge, and Killarney Lodge are shown on the map overleaf and details may be obtained by writing to these lodges, in care of Algonquin Park Post Office, Ontario. **Campgrounds** There are nine organized campgrounds along Highway 60. Please note that within three km of the public roads in the Highway 60 corridor, camping is permitted only at these campgrounds. A daily camping fee is required for each campsite (see above) and only one motor vehicle may be parked on each site. There are modern laundry facilities at Lake of Two Rivers, Mew, Pog, and Canisbay campgrounds, and all of these except Canisbay have showers as well. Maps of each camp-



ground are available at their respective campground offices.

**Trailers and Recreation Vehicles** Most campsites in the campgrounds along Highway 60 (but none at Opeongo) will accommodate trailers and other recreation vehicles. A trailer sanitation station is located at km 35.6.

**Electrical hookups** are not available. **Bears** Due to their exposure to human food and garbage, and to people who deliberately feed them, many bears have lost their fear of humans and will visit campgrounds in search of food. To avoid loss of food, damage to camping equipment, and the destruction of the bears, experienced campers observe the following commonsense rules:

1. Never feed or approach a bear.
  2. Store all your food in the trunk of your car.
  3. Burn all the garbage you can in your campfire, and put the rest in the containers provided.
- Supplies** Gasoline may be purchased at the Portage Store, Opeongo Store, and Killarney Lodge. Some groceries and ice are sold at the Two Rivers Store, Portage Store and Opeongo Store. **Meals** Meals are available at the Portage Store and at the lodges. Light lunches are also available at the Two Rivers Store. **Canoes** Canoes may be rented at the Portage Store, Opeongo Store, Killarney Lodge, and Bartlett Lodge.

## Things to See and Do

The Park's interpretive program consists of various services designed to help you know and appreciate Algonquin better. Specific information about upcoming program events is available on bulletin boards throughout the Park.

**The Park Museum** at km 20 contains exhibits of some of the Park's fish, wildlife, and geography. Theatre presentations tell the story of the Park's natural environment, geography, history, and management. The staff is always ready to answer your questions about plant and animal life, Park history, and management. The Park Museum is open on weekends from early May to mid-June, and then daily to mid-October.

**The Pioneer Logging Exhibit** just inside the East Gate portrays, through old photographs and pieces of equipment, the story of logging in this region, from the early square timber days to the last of the great river drives. An audio-visual program sums up the story and brings it up to the present. The exhibit is open daily from 10 a.m. to 6 p.m. on Labour Day, and on weekends in the spring and fall.

**The Raven** is Algonquin Park's weekly bulletin, featuring articles on natural and human history, management, and current events in the Park. Leave your name at the Museum and we'll send you a complete set in the fall.

**Interpretive Trails** The locations and lengths of the nine interpretive trails along Highway 60 are marked on the map. Through the use of illustrated guide booklets (see order form) each trail is designed to explore a different aspect of the Algonquin environment.

**Conducted Hikes** are led by Park Naturalists every day from late June to Labour Day. These consist of an hour and a half's leisurely walk, exploring and learning about some part of the Algonquin environment. Times and locations are posted on bulletin boards and listed in "The Raven".

**Evening Programs** begin at dusk every evening at the Pog Lake Outdoor Theatre (km 35.4) from late June to Labour Day. Each program lasts about an hour and a half and consists of a film, a slide talk about some aspect of the Park, a question period, and then another film. No talk or film is presented more than once every ten days. When bad weather interferes, the programs are held at the Park Museum.

**Special Events** include conducted canoe outings and, depending on the time of summer, bird, wildflower and mushroom hikes. Public wolf howling expeditions take place in August when an accessible wolf pack is located by the naturalist staff.

**Talks or Hikes** for groups may be arranged at any time to meet the needs of the group by enquiring at the Park Museum.

## Algonquin Provincial Park 1980 Publication List and Order Form

The publications listed below may be obtained at the Information Centre at km 23, the Park Museum at km 20, and in some cases at the gates or canoe centres. If you wish to order by mail, please fill out and detach this order form and send it with your money order (payable to: Treasurer of Ontario) in Canadian funds to: **Park Superintendent, Algonquin Provincial Park, Ministry of Natural Resources, Whitney, Ontario K0J 2M0.**

Quantity	Title	Price
.....	Algonquin Provincial Park Canoe Routes (see description on reverse side) .....	\$1.00
.....	Algonquin Provincial Park Hiking Trails .....	50¢
.....	Fishing in Algonquin Provincial Park .....	\$1.00
.....	Birds of Algonquin Provincial Park .....	\$1.00
.....	Mammals of Algonquin Provincial Park .....	\$1.00
.....	Reptiles and Amphibians of Algonquin Park .....	\$1.00
.....	Pictorial History of Algonquin Provincial Park .....	\$1.00
.....	Wildflowers of Algonquin .....	\$1.50
.....	Geological Guide to Highway 60 .....	50¢
.....	Whiskey Rapids Trail (river ecology) .....	20¢
.....	Hardwood Lookout Trail (hardwood forest ecology) .....	20¢
.....	Peck Lake Trail (lake ecology) .....	20¢
.....	Hemlock Bluff Trail (park research) .....	20¢
.....	Two Rivers Trail (forest history) .....	20¢
.....	Lookout Trail (park geology) .....	20¢
.....	Booth's Rock Trail (man's impact on park) .....	20¢
.....	Spruce Bog Boardwalk (spruce bog ecology) .....	20¢
.....	Beaver Pond Trail (beaver ecology) .....	20¢

Please send me the publications checked on the above list for which I enclose my money order for \$..... (Canadian).

Name .....  
Address .....  
City .....  
Province or State ..... Code .....



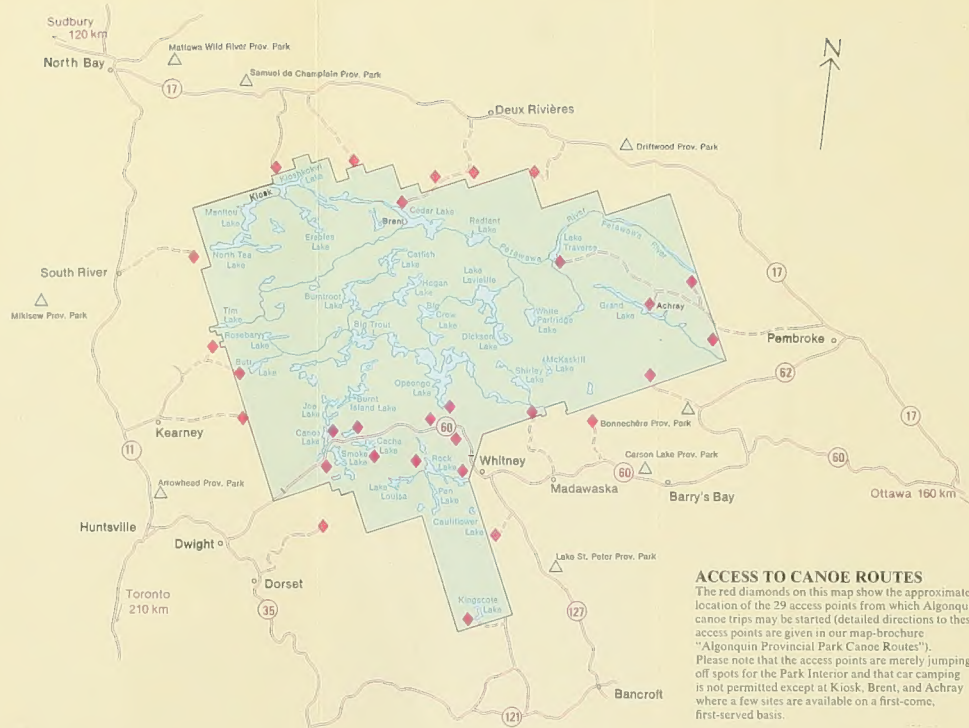


## TWO ALGONQUINS TO CHOOSE FROM

# 1

### THE PARK INTERIOR

The essence of Algonquin is its vast interior of maple hills, rocky ridges, spruce bogs, and thousands of lakes, ponds, and streams. Over 1500 km of canoe routes await those who wish to explore this rugged beauty. By paddle and portage — the only way to really know Algonquin.

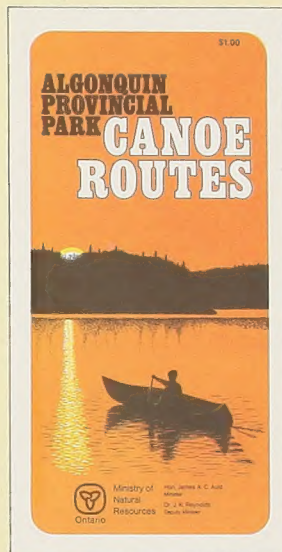


### ACCESS TO CANOE ROUTES

The red diamonds on this map show the approximate location of the 29 access points from which Algonquin canoe trips may be started (detailed directions to these access points are given in our map-brochure "Algonquin Provincial Park Canoe Routes"). Please note that the access points are merely jumping off spots for the Park Interior and that car camping is not permitted except at Kiosk, Brent, and Achray where a few sites are available on a first-come, first-served basis.

## CANOE ROUTE INFORMATION

Complete canoe route information is available in the map-brochure "Algonquin Provincial Park Canoe Routes." The map shows, at a scale of 2 miles to the inch, the entire Park network of canoe routes, portages, and interior campsites. Elsewhere on the map, detailed directions are given for 29 different access points, along with complete information on planning and carrying out a canoe trip. You may purchase your copy of "Algonquin Provincial Park Canoe Routes" for \$1.00 at the canoe centres, gates, Information Centre, or the Park Museum. You may also fill out the order form on the reverse side of this panel and mail it to us with your money order as instructed on the form.

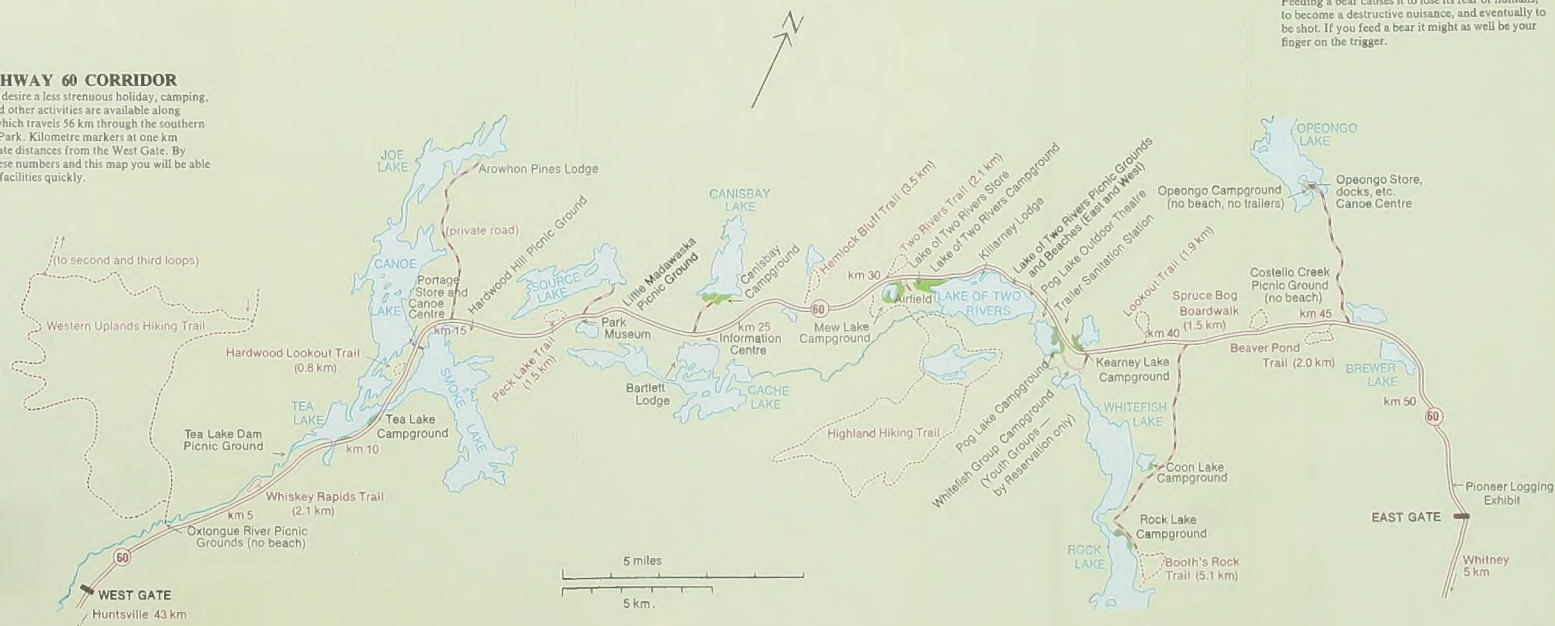


## TWO ALGONQUINS TO CHOOSE FROM

# 2

### THE HIGHWAY 60 CORRIDOR

For those who desire a less strenuous holiday, camping, picnicking, and other activities are available along Highway 60, which travels 56 km through the southern section of the Park. Kilometre markers at one km intervals indicate distances from the West Gate. By referring to these numbers and this map you will be able to locate park facilities quickly.



## REMEMBER... TO FEED A BEAR IS TO KILL A BEAR

Feeding a bear causes it to lose its fear of humans, to become a destructive nuisance, and eventually to be shot. If you feed a bear it might as well be your finger on the trigger.